



TOWCESTER RURAL DISTRICT



ANNUAL REPORT

of the

Medical Officer of Health

for the

Year 1967



JOAN M. ST. V. DAWKINS, M.B., B.S., D.P.H., D.C.H.



Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

<https://archive.org/details/b30194349>

TOWCESTER RURAL DISTRICT



ANNUAL REPORT

of the

Medical Officer of Health

for the

Year 1967



JOAN M. ST. V. DAWKINS, M.B., B.S., D.P.H., D.C.H.

SUMMARY OF VITAL STATISTICS, 1967

Area (acres)	...	...	...	...	...	...	59,005
Population 1961 (Census)	...	...	...	...	...	...	15,198
Population (Registrar General's Mid Year Estimate)	...	...	...	...	...	...	16,780
Number of separate dwellings occupied (1961 Census)	...	...	...	...	...	...	5,263
Number of separate dwellings occupied 1967	...	...	...	...	...	...	6,075
Rateable Value	...	...	...	...	...	...	£443,203
Product of a Penny Rate, 1967	...	...	...	...	...	...	£1,830

Live Births—					<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Rate</i>
Legitimate	...	...	...	...	321	183	138	
Illegitimate	...	...	...	...	19	10	9	
					340	193	147	20.3

Stillbirths—					<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Rate</i>
Legitimate	...	..	.	...	5	2	3	
Illegitimate	...	...	..	...	1	—	1	
					6	2	4	17.0

					<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Rate</i>
Deaths (all causes)	...	...	...	...	163	76	87	9.7
Deaths from Pregnancy, Childbirth, Abortion	...	...	...	...	—	—	—	Nil
Neo-natal Mortality	...	...	...	...	1	—	1	3.0
Early Neo-natal Mortality	...	...	...	...	—	—	—	Nil
Perinatal Mortality	...	...	...	...	6	2	4	17.0

Infant Mortality—								
Legitimate	...	...	...	...	3	1	2	9.0
Illegitimate	...	...	...	...	—	—	—	Nil

Deaths from Cancer (all ages)	...	...	...	...	...	...	...	32
Deaths from Tuberculosis	...	...	...	...	...	...	...	Nil
Deaths from Heart Disease	...	...	...	...	...	...	...	99

Towcester Rural District Council

Members of the Public Health Committee:

Mr. P. J. S. Bowden, Mr. R. J. Chapman, Mr. T. E. England, Revd. H. P. Hoskin, Mr. J. H. Ivens, Mrs. D. M. Moore, Mr. E. G. Nicholls (*Chairman*), Mr. W. E. G. Paffey (*Vice-Chairman*), Mr. W. G. Peel, Mr. L. R. Rivett, Mr. W. J. Roberson, Revd. J. D. Smyth, Mr. R. H. Whitlock, Mrs. I. A. Wildbur.

Members of the Housing Committee:

Mr. N. Abbott, Mrs. B. J. Dennis, Mrs. M. Jelley, Mr. G. Lovell, Mr. E. M. Major-Lucas, Mr. B. L. Marritt, Mr. D. McArthur, Mrs. M. D. Paffey, Mr. J. T. Pinkard, Mr. H. O. Prosser, Mr. R. L. C. Ridgway (*Vice-Chairman*), Mr. W. W. Stephenson (*Chairman*), Mr. R. A. Whitlock, Mr. S. G. Whitmore.

Public Health Officers of the Local Authority :

Medical Officer of Health—

JOAN M. ST. V. DAWKINS, M.B., B.S., D.P.H., D.C.H.

also holds appointments of

Medical Officer of Health to

Daventry Borough, Daventry Rural District, Brixworth Rural District, Brackley Borough, Brackley Rural District, Northampton Rural District and Senior Assistant County Medical Officer of Health, Northamptonshire County Council.

IKAM UL MAJID, M.B., B.S., D.P.H. (*From 1st May*)

Deputy Medical Officer of Health

Assistant County Medical Officer

Chief Public Health Inspector :

DAVID JOSEPH POWELL, B.Sc.,

Certified Inspector of Meat and Other Foods.

Deputy Chief Public Health Inspector :

RONALD FRANK HALL, C.S.I.B., M.R.S.H.,

Certified Inspector of Meat and Other Foods.

Additional Public Health Inspectors :

DAVID CLIFFORD VANSON, D.P.H.I.E.B., A.R.S.H.,
M.A.P.H.I.,

Certified Inspector of Meat and Other Foods.

KENNETH BARNES ELLIS, C.S.I.B., M.A.P.H.I.,

(*Until February, 1968*)

Certified Inspector of Meat and Other Foods.

Surveyor and Architect :

GEORGE BERRIDGE, M.Inst.R.A., A.I.A.A.

October, 1968.

To the Chairman and Councillors of the Rural District of Towcester.

Mr. Chairman, My Lady, Ladies and Gentlemen,

I have the honour to present the annual report of the Medical Officer of Health for the year 1967, incorporating that of the Chief Public Health Inspector.

The report is presented in five sections each dealing with an aspect of environmental control. In addition I have made some observations on general trends which may affect the health of the individual.

The district continues to be predominantly rural, however considerable housing development has taken place along the North Bucks border of the district during the year ; with the prospect of the new town of Milton Keynes and Northampton expansion further population increase can be anticipated.

The Registrar-General's mid-year population figure of 16,780, compared with 16,460 last year, was probably exceeded by the end of the year.

The vital statistics show that there were 163 deaths, 33 less than last year. This gives a standardised rate of 9.7 which is well below the figure of 11.2 for England and Wales. Female deaths exceeded male deaths by 11. Details and comments on the causes of deaths are given in Section A.

The total number of births was 340, a rise of 13 on last year's figure of 327 ; 19 were illegitimate, 7 less than last year.

A total of 305 cases of infectious diseases were notified as compared with 260 last year, due to an increase in measles which is following its biennial incidence. There were no cases of dysentery and only a single case of food poisoning. Once again there were no cases of poliomyelitis or diphtheria and no deaths from tuberculosis. The incidence of infections remain therefore at a satisfactorily low level. However, should standards of prevention fall there could be a reoccurrence of disease. With each successive year of freedom from infections there is a diminishing recollection of their dangers. It is imperative that a high level of childhood immunisation to diphtheria, tetanus, whooping cough, poliomyelitis and smallpox be maintained not forgetting the necessary booster doses. Vaccination against tuberculosis follows in the early teens. In the prevention of food poisoning, though low in this district, which is far too prevalent generally, the accidental contamination of food by careless food handlers is the major cause. Scrupulous cleanliness of food handlers in the home, in cafés and in food shops is essential. In this district with its many establishments where food is either manufactured or served the rules of hygiene are strictly necessary. Your Inspectors are diligent in their work in this respect, but even the rigorous implementation of the Food Hygiene Regulations are without avail unless supported by the personal action of both the public who consume and the food handlers

who prepare the food. Details of the causes and method of prevention of food poisoning are given in Section F.

The amount of slaughtering taking place at the large private abattoir at Blisworth showed a steady increase during the year until the foot and mouth epidemic intervened. Despite the latter, the total number of animals slaughtered was approximately the same as in the previous year. Notwithstanding the increased rate of throughput, a hundred per cent meat inspection service has been maintained.

Further progress was made in the erection of Council houses, eighteen new houses being added during the year. Apart from a few houses in each parish, "slum clearance" has virtually been completed. The present aim is to ensure that all the remaining pre-war privately owned houses are suitably modernised. The Council itself is setting a very good example in this respect having carried out sixty eight modernisations to its own older Council houses.

The recently held enquiry into the Wappenham and District sewerage and sewage disposal scheme is another step nearer the final objective, namely, the provision of sewers in every village in the area.

Everyone is aware of the growing number of elderly people in the community; here the district has provided excellent accommodation both in warden supervised dwellings and bungalows. At present in England and Wales there are 5½ million people aged 65 years or more; within the next decade the total will rise to 7 million and by the year 2001 to nearly 7½ million. This growth is a direct result of the rising number of births during the late Victorian and Edwardian times, the saving of life from the improved standard of living and the successful control and treatment of infectious diseases. Most elderly people are well able to look after themselves but many cannot. The social aspect alone is a whole complex of different problems. The age of retirement is generally fixed but there is little preparation for the years of retirement. There is the question of accommodation, in separate dwellings adapted for their needs, with their families or in residential homes. Loneliness is far too common among elderly people. Underlying these questions is the need for an adequate income. The major physical disabilities of old age, bronchitis, arthritis, strokes and heart diseases are well known and need special medical and nursing care, but what is more common is increasing frailty as well as the mental difficulties of old age. The community provides certain services, but many elderly people fail to avail themselves of these or even know to whom to turn for information. The solution of caring for them has yet to be found. This is a task which falls on us all, the elderly people themselves, their families, their neighbours, voluntary and many professional workers.

While environmental control of health improves year by year, there remain hazards whose prevention depend less on external circumstances than on the choice of the manner of life that each individual makes. While the dangers of infectious illness, malnutrition, poor housing, poverty and other adverse factors are gradually eliminated, health is now assailed from other sources, and many people are still suffering needlessly and dying before achieving their full span, from preventable afflictions. Deaths from accidents in the home and on the road, from cancer of the lung, and from early arterial disease are taking an increasing and unnecessary toll, but their prevention now must depend on personal response.

In the choice of the individual the acceptance of the habit of cigarette smoking is most relevant in this context. That the habit is related to the ever rising number of deaths from cancer of the lung, its association with chronic bronchitis and coronary heart disease is now universally accepted. The facts have been given publicity by all the mass media and few cannot be aware that cigarette smoking is not only a foolish but a dangerous habit. Yet there is no decrease in consumption and many young people start to smoke each year. Should the hazard, that they embrace so light-heartedly, be caused by a failure in the protection of the environment so that individuals as a result of such exposure were likely to contract cancer then there would be public acclamation that the danger should be removed. When, however, the necessary action is dependent on individual rectitude there is little or no response. The public co-operate well when only single actions such as attendance for immunisation is needed. However, it is hard to elicit a response when it is necessary to relinquish a pleasurable personal habit, showing no immediacy of danger, and maintain this discipline over a long period.

Again the incidence of early arterial disease, particularly in middle aged males, resulting in coronary artery disease and strokes is showing no decline, and there is some evidence that it is increasing. This problem is arising in all civilised countries. Here again, though many factors are involved, there are two clear indications that the disease is less prevalent in those individuals who take regular physical exercise, and in those who are not obese. Because of increasing transport, sedentary occupation and leisure the need for the taking of regular exercise is lessening. Food is increasingly abundant and intake is often in excess of calorie output. In a primitive society these conditions do not occur. Regular exercise is as needful for health as fresh air and pure water. Again this is a pattern of life, which needs to be incorporated in a way of living and remains at the discretion of the individual.

Deaths from accidents are in the majority preventable on both the road and in the home. Those occurring in the home affect, most often, either young children or the elderly, while those on the road are indiscriminate in their toll. I make further observations, in section B, on these subjects.

It is perplexing that in removing material anxieties from society there is no lessening of mental ill health, either in individual suffering such as neuroses and mental illness or in society as evident by the increase in crime, delinquency, divorce and cruelty to children. Drug taking among teenage children is another disturbing factor.

I wish to record my thanks to Mr. Powell for his diligent work throughout the year, his staff and the Chairman, the Clerk and Members of the Council for their interest and support. I wish also, to thank the County Medical Officer of Health for his ready co-operation at all times.

I have the honour to be your

obedient servant,

JOAN M. ST. V. DAWKINS,
Medical Officer of Health.

Town Hall,
Towcester.
Tel. Towcester 211.

SECTION A.

NATURAL AND SOCIAL CONDITIONS

Social Conditions—The greater part of the land area in the district is utilised for agricultural purposes, namely, arable and stock rearing although a number of milking herds, including a few large ones, still exist. The fixing of the village boundaries may limit future residential expansion, which has recently been both rapid and extensive, but these may have to be modified because of the pressure of the changes about to take place in the surrounding regions. In the meantime, a record number of private houses are in the course of erection in the district.

The electronic components factory and the engineering works at Towcester are both extending their floor capacities mainly for the purpose of accommodating new plant. Such expansion, however, must be indicative of the further progress of these industries and therefore of benefit to the community. Similarly, the rapid expansion of the private abattoir and meat products factory at Blisworth, although placing a further burden on the health inspectorate, must be welcomed for the same reason. Most of the industrial population of the district work in others centres such as Northampton, Wolverton, Roade and even as far distant as Luton and London. There are also a number of thriving small industries of a specialised nature needing manual skill such as hand made shoes, briar pipes and wrought iron work.

The Grand Union Canal crosses the district so that a considerable length lies within its boundaries. The increasing use of the canal for pleasure craft and the possibility of the establishment of a chandlery and repair depot at Blisworth are likely to bring further duties for the public health inspectors who already have considerable responsibilities in connection with other existing outdoor recreational facilities in the district. Predominant among the latter are the Towcester Racecourse, the internationally known motor racing circuit at Silverstone and the privately owned recreational park at Cosgrove Lodge.

Area—The area of the district is 59,005 acres.

Population—The Registrar-General has estimated the resident mid-year population for 1967 to be 16,780 as compared with 16,460 in 1966. The natural increase in population, i.e., the excess of births over deaths, amounts to 177 persons as compared with 131 persons for the previous year.

Deaths—The total number of deaths assigned to the district by the Registrar-General after adjustment for outward and inward transferable deaths was 163 as compared with 196 for 1966. The crude death rate based on the mid-year population was 9.7 as compared with 11.9 for 1966. The following table shows the death rates for the quinquennium, 1963/1967, together with the corresponding rates for England and Wales and the Administrative County.

Death Rates, 1963-1967

	1963	1964	1965	1966	1967
Towcester R.D. ...	11.6	11.4	9.8	11.9	9.7
Administrative County	11.21	10.56	10.8	11.12	10.1
England and Wales ...	12.2	11.6	11.5	11.7	11.2

A list of causes of death classified according to the Abridged List of Causes of Death as used in England and Wales is given in Table No. 1, whilst the history of the rate together with other vital statistics for 1919-1967 is shown in Table No. 2.

In order to make allowances for the age and sex distribution of populations in different areas, the Registrar-General has calculated the area comparability factor which, when multiplied by the local death rate, allows a truer local death rate of 9.3. The ratio of local adjusted death rate to national rate being 0.83.

The vital statistics show that there were 163 deaths compared with 196 last year. This gives a standardised rate of 9.7 compared with the national figure of 11.2. Female deaths exceed male deaths by 11. The great preponderance of deaths was from diseases of the heart and circulation making a total of 99, of which 38 died from coronary heart disease, 22 from vascular lesions of the nervous system (strokes) and the remaining 39 from other heart or circulatory disease. Diseases of heart and circulation together with cancer constitute over three quarters of the total deaths. This year 32 people died as a result of cancer.

In a review of the causes of death the primary concern is to assess which could have been prevented. In the main, people are living longer and the majority of deaths are those which occur in the older age groups, and are primarily caused by degenerative disease of the arteries and the cancers, still the inevitable concomitants of the ageing process. However, coronary thrombosis, strokes and cancer of the lung are major causes of death in the middle aged male taking an increasing toll from men in their prime and at a time when they are making a major contribution to society. These are unnecessary deaths, and must be a serious cause of concern. Apart from a few who inherit a tendency to early arterial disease the condition results mainly from sedentary life. Certain groups are not affected, and these are men who take regular exercise. Farmers, postmen, gardeners and bus conductors are known to have a lower incidence of coronary disease than commercial travellers, business executives and bus drivers. The message is clear but few heed it. Regular exercise throughout life should be the universal practice, and all members of society from childhood to old age should remember this precept. With the mechanisation of industry and increasing motor transport, the need for physical activity is ever diminishing. It is therefore increasingly necessary that leisure instead of being sedentary should involve the taking of some form of pleasurable exercise. The mass production of highly refined food, its year round availability, and the means to purchase has enormously increased food consumption. This combined with lack of exercise, resulting in an excess of caloric intake over energy output is the probable major factor in the cause of early arterial disease, the stress of modern life adding perhaps a further cause. Obesity needs now to be regarded as a major hazard to health particularly in males who are

more prone than females to arterial disease. Females are however affected equally with men after the menopause.

Nationally this year again the number of deaths from cancer of the lung has increased ; statistics also show an increase in a lower age group. Males still predominate but females are catching up due to the increase in the number of female cigarette smokers. In 1929, 2,751 died from cancer of the lung, in 1939, 6,214 ; in 1963, 24,434 ; in 1965, 26,399 ; in 1966, 27,013 and in 1967, 28,250 ; 23,946 males and 4,304 females. The relationship between heavy cigarette smoking and cancer of the lung has been firmly established. Yet each year thousands of young people start to smoke and many others continue to indulge in heavy cigarette smoking. Health education in this field appears to have failed and the public response to a habit which is pleasurable and where there is no immediacy of danger is apathetic.

Road accidents in Great Britain since the beginning of the century have caused 300,000 deaths. In 1966, 7,985 died on the roads compared with 7,952 in 1965 and in 1967, 7,319 died. Analysis by age has shown the 15-25 year group (males) to be most at risk due to temperamental failures of individuals. The necessity of proper maintenance of the vehicle, habitual use of safety devices such as belts in cars or helmets on motorcycles, and driving with due consideration for the safety of other road users is stressed. Since the introduction of the breathalyser there would appear to be, so far, a decrease of 8% of deaths.

Confirmed figures regarding accidents in the home for 1967 have not yet been published but provisional figures indicate a general worsening of the situation. Falls constitute by far the most frequent cause of accidental death in and around the house, about 59 per cent of the total. Nearly 90 per cent of these fatalities were to people in the age group 65 and over. The next most common cause was poisoning followed by burns and scalds, and finally suffocation and choking. Attention to details such as fire guards, fire resistant materials for children's nightdresses, simple structural alterations in houses for elderly people and provision of physical aids, keeping medicines under lock and key, are required to prevent these deaths.

Births—The number of live births assigned to the district was 340 (193 males, 147 females) as compared with 327 in 1966, thus giving a birth rate of 20.3 per thousand of population, as compared with 19.8 in 1966. The following table shows the birth rate for the quinquennium, 1963-1967 together with other rates for comparison.

Birth Rates, 1963-1967

	1963	1964	1965	1966	1967
Towcester R.D. ...	19.5	18.5	19.7	19.8	20.3
Administrative County	18.62	19.10	18.8	18.54	18.0
England and Wales ...	18.2	17.1	18.1	17.7	17.2

The local birth rate, when modified by the application of the area comparability factor of 1.09, gives an adjusted rate of 22.1 as compared with 17.2 for England and Wales. The ratio of local adjusted birth rate to national rate being 1.29.

Stillbirths—The number of stillbirths registered was 6 as compared with 1 in 1966. This is equivalent to a rate of 17 per thousand total live and still births.

Illegitimate Birth Rate—19 illegitimate live births (10 males, 9 females) were registered as compared with 26 in 1966. This number gives a rate of 5.5 per cent live births as compared with 7.07 for the County.

Infant Mortality—The number of infants who died before attaining their first birthday was 3. The rate per thousand related live births was 9.0 which is lower than the national rate of 18.3.

Deaths under one year per thousand Live Births					
	1963	1964	1965	1966	1967
Towcester R.D.	6.6	19.5	12.4	11.0	9.0
Administrative County	17.92	18.36	16.8	16.0	18.0
England and Wales ...	20.9	21.3	19.0	19.0	18.3

Legitimate infant deaths numbered 3, giving a rate of 9.3 per thousand legitimate live births.

No illegitimate infant deaths were recorded.

Neo-Natal Mortality—Deaths of infants under 4 weeks amounted to 1 giving a rate per thousand total live births of 3.0 No deaths of infants under one week were recorded.

Stillbirths and deaths under one week combined total 6, giving a perinatal mortality rate of 17.0 per thousand total live and still births.

Maternal Mortality—No death was recorded.

SECTION B.

GENERAL PROVISION OF SERVICES

Laboratory Facilities—The bacteriological work associated with the control of infectious diseases is carried out by the Public Health Laboratory Service, whose laboratory at Northampton General Hospital is in the charge of Dr. L. Hoyle. The bacteriological examination of water, milk, food and ice-cream is also carried out by Dr. Hoyle whose services are invaluable to the district particularly since the establishment of the new abattoir has greatly increased the number of specimens of diseased meat which need to be examined as soon as possible.

Ambulance Facilities—This work is undertaken by the County Council. The ambulance vehicles are stationed at Towcester and the drivers and attendants are recruited locally.

Hospitals—There are no hospitals in the district. Infectious disease cases which require hospital treatment are accommodated by the Oxford Regional Hospital Board at their Harborough Road Hospital Northampton, which is under the management of the Northampton Hospital Management Committee. There is one small private nursing home in the district catering specially for the aged and chronic sick.

Child Welfare Centres and Clinics—Infant welfare centres are held at Towcester, Deanshanger, Potterspury, Old Stratford and Silverstone and the mobile clinic attends at Abthorpe, Blakesley, Blisworth and Greens Norton. Transport facilities are provided by the County Council in various parts of the district for mothers and children to attend clinics at a nearby centre.

Nursing in the Home, Midwives and Health Visitors Services—The whole of the district is covered by these services either by the district nurses or the health visitors.

The Home Help Service—This essential service is operated by the County Council in all parishes of the district for domiciliary and maternity cases where considered necessary and especially for the care of old people in order that they can be allowed to remain in their own homes rather than be removed to an institution.

Care and After-Care Service—The County Council provide a number of facilities in respect of the crippled, aged persons, diabetics and the mentally ill. They are also responsible for the preventive services against tuberculosis.

National Assistance Acts—The removal to suitable premises of persons in need of care and attention is the responsibility of the Council. Instant removal of urgent cases can now be obtained on the joint certificate

of the Medical Officer of Health and a general practitioner. This procedure makes it unnecessary for an application to be made to a court of summary jurisdiction until three weeks after the removal. No action under this Act was found necessary during the year.

The Council are also responsible in certain circumstances for the burial or cremation of the body of any person who has died or who has been found dead in the district. Two such burials were dealt with during the year.

Welfare of the aged—The following provide services for old people :

1. NATIONAL HEALTH SERVICE

(a) *General Practitioner*

(b) *Hospital and Specialist Services including the Almoner Service.*

2. THE COUNTY COUNCIL

(a) *The Health Department*

(i) District Nurses

(ii) Health Visitors

(iii) Home Help Service. The Home Help Service is of inestimable value in the prevention of breakdown in the aged, and many are able to remain in their own homes who would otherwise have to be removed to institutions. Several old people were kept under observation during the year.

(b) *The Welfare Department*

(i) Part III accommodation and homes

(ii) Special Services for the Blind, etc., and home fittings where necessary.

3. THE NATIONAL ASSISTANCE BOARD

Financial help where necessary.

4. THE DISTRICT COUNCIL

Homes for the aged, flats, and in some cases flatlets with Warden supervision.

5. VOLUNTARY ORGANISATIONS

These are many and services vary in different areas. They include holiday schemes in which old people are taken on seaside holidays in off-season times ; the Darby and Joan Clubs ; " Meals on Wheels " Service ; the Home Visiting. The Women's Royal Voluntary Service very often undertakes many of the above duties, while in other areas local voluntary committees run the various organisations. The Rural Communities' Council, together with the Old People's Welfare Committee, provide co-operation between the various services.

Your Medical Officer of Health, having a special interest in the welfare of the aged, and by virtue of her appointment both to the District and the County Council, and by her relationship with other medical colleagues, endeavours to fulfil the function of co-operation and co-ordination between these many agencies. Many cases of breakdown can be prevented by early application of these services.

Voluntary organisations have also requested your Medical Officer to give lectures and talks, and each invitation received is accepted and fulfilled.

SECTION C.

SANITARY CIRCUMSTANCES OF THE AREA

Water Supply—There are public mains within easy reach of all but the remotest parts of the area. An ample supply of water of good chemical and bacteriological quality was maintained throughout the year for domestic, agricultural and industrial purposes. The statutory undertakers involved are the Bucks Water Board who utilise the river gravels near Buckingham as the source from which water is pumped to treatment works at Foxcote before entering the distribution system at Whittlebury. The main holding reservoir is a covered reinforced concrete structure built partly into the ground at Maidford—the most elevated position in the district. Other smaller holding and balancing reservoirs of similar construction are situated at Field Burcote and Tiffield and, in addition, two elevated concrete towers at Paulerspury and Whittlebury have been incorporated into the scheme.

As stated, a few properties—mostly isolated agricultural holdings outside the scope of the scheme—have been provided by the owners with a piped supply for domestic and agricultural purposes based on local wells and springs. Four private estates in the district, although within the effective area of the public mains, choose to continue to use water from springs and wells on these estates rather than from the public mains. The opinion has been expressed in previous reports that the quality control of such supplies is not always as satisfactory as it should be. For this reason the results of samples submitted for analysis too often emphasise the excellence of the public supply over that of the private supply as far as the essential safety factor of bacteriological quality is concerned. During the year, the department obtained and submitted for bacteriological analyses 47 samples of drinking water : 17 were from the public supply all of which proved to be of excellent quality. The remaining 30 obtained from private supplies, gave results as follows : 14 good, 2 suspicious and 14 bad. Of the latter all but two contained bacteria of faecal origin and appropriate action was taken by the department to deal with the supplies involved. In fact, most of the “good” results were obtained as a sequel of the subsequent investigations. During the year the Bucks Water Board themselves examined 172 samples from consumer’s taps in the district. Three of these containing coliform organisms proved to be satisfactory on re-sampling.

Practically every house in the district now has the benefit of a piped water supply laid on to the premises whether the actual source of supply is the public mains or a private well or spring. The position has improved to such an extent that public standpipes are no longer used in the area. There are, however, still a few dwellings which obtain their water from outside taps but these are, almost without exception, sub-standard houses either awaiting demolition or modernisation when sewers become available. A subsequent table shows the position with regard to public and private piped supplies.

The Council has signified its willingness to permit the fluoridation of the piped water supply but the actual dosing is in the hands of the Bucks Water Board who must also come to an agreement with the other constituent authorities. Up to the time of writing, the process of adding fluoride to the water had not commenced but there is a natural fluoride content of about 0.2 parts per million. The water as supplied by the Bucks Water Board is not plumbo-solvent and samples from private sources in the district submitted for specific analyses also indicated that no waters in use in the district possess this property. A sample of water from the public mains obtained by the Chief Public Health Inspector and submitted for chemical analysis gave the following results:

THE COUNTIES PUBLIC HEALTH LABORATORIES

Analysis of a Sample of Water received 4.10.67 from
Towcester Rural District Council

Chemical Results in parts per million (mg./l)

Appearance: Very faint opalescence with a very slight deposit.

Microscopical exam.: Mineral particles.

Colour (Hazen)	...	...	8	Turbidity (A.P.H.A. units)	less	
pH	...	...	7.4	than	...	3
Electric conductivity	...	...	560	Odour	...	Nil
Chlorine present as Chloride	...	...	35	Free Carbon Dioxide	...	13
Hardness: Total	...	...	270	Dissolved Solids dried at 180°C	...	370
Nitrate Nitrogen	...	...	1.2	Carbonate	...	155
Ammoniacal Nitrogen	...	...	0.06	Non-carbonate	...	115
Albuminoid Nitrogen	...	...	0.20	Nitrate Nitrogen	...	Absent
Metals: Iron	...	...	0.16	Oxygen Absorbed	...	1.7
Zinc, Copper, Lead	...	Absent		Residual Chlorine	...	0.03

ANALYST'S REMARKS

This sample is practically clear and bright in appearance, has a reaction slightly on the alkaline side of neutrality and is free from metals apart from a minute trace of iron. The water is hard in character but its hardness and its content of mineral and saline constituents are not considered excessive. The degree of organic impurity is very moderate.

These results indicate a pure and wholesome water suitable for drinking and domestic uses, from the aspect of the chemical analysis.

The total consumption of water from the public mains during 1967 was 314,523,000 gallons. This was 40 million gallons in excess of the previous year which was in itself 20 million gallons more than in 1965. The per capita consumption amounted to 51 gallons per day for all purposes i.e., domestic, agricultural and industrial as opposed to 46 gallons in 1966. These figures do not take into account water obtained from sources other than the public mains so that the actual consumption is greater than the apparent consumption of 51 gallons. The population was estimated to have increased by 320 from the previous year so that the consumption of water has actually increased by an amount which is quite out of proportion. This is very puzzling and, of course, must be of great concern both to the Council and to the undertakers.

Swimming Baths—During the season, inspections were carried out by the public health inspectors of the open-air pool situated at Cosgrove Lodge Park. This pool, although privately owned is open to the public and well patronised. Samples of the bath water submitted for bacterio-

logical analysis proved to be satisfactory and no complaints were received during the year as to the management of the pool or associated buildings. This pool is fitted with an efficient automatic sterilising plant and the water can be heated if required. A number of private pools exist in the district—one attached to a County Primary School—from which the water is sampled on request or when other duties permit.

Sewage Disposal, Drainage and Sewerage—At the time of writing, substantial progress has been made with the Wood Burcote extension of the Towcester sewers and notice had been received of the Ministry's intention to carry out an investigation into the Wappenham etc. sewage and sewerage disposal scheme. Consulting Engineers had also submitted, for the Council's approval, the preliminary stages covering the Blakesley etc. region and also that dealing with the villages of Grafton Regis and Alderton. This means, in effect, that all the unsewered villages in the rural district are now associated with new schemes which have progressed to a point at least beyond the preliminary survey stage and all of which have received the Council's approval. It would appear, therefore, that we are at last within sight of the goal for which the Council has been striving since 1946, namely, the complete coverage of all major centres of population by adequate sewerage schemes. The provision of this basic amenity in the unsewered villages is the only method of abating the nuisances which now occur from the discharge of existing village drains into open watercourses. The lack of proper sewers is holding up the improvement of many houses needing modern amenities, such as bathrooms and w.c.s. and it is to be hoped that the Council will not have to enforce legally such modernisations in unsewered villages until proper drainage facilities are available. Apart from the extra cost incurred by installing septic tanks in such cases, there is no doubt that the increase of nuisance now being experienced from the open ditches stems from the modernisation of older properties by owners who have installed tanks—frequently with the aid of improvement grants.

As stated in previous reports, drainage difficulties in the smaller hamlets and isolated properties will still remain. It has been the practice in the past for the latter to be dealt with by means of sub-soil irrigation but increasing difficulty is being encountered in many instances because the porosity of the local sub-soil is limited and incapable of carrying an increased load of effluent. The latter is often the sequel of modernisation or, in the case of premises where refreshment is served, of the increase in patronage. Such a situation can, and does, pose very difficult problems for the Public Health Inspectors.

It is pleasing to be able to report that the situation at one of these trouble spots has been very much improved, if not entirely solved, namely, the Towcester Racecourse. Sanitary accommodation erected in conjunction with the new refreshment room enabled much of the existing primitive arrangements to be closed. Unfortunately the new accommodation was found to be inadequate on one particular occasion but on the advice of the Chief Public Health Inspector, the owners decided to hire modern mobile toilets which were found to be very successful in meeting the extra accommodation required.

As previously stated, the Silverstone Circuit presents a much more difficult problem which will not be properly solved until sewers are

available. Most of the track is served by a conservancy system which is well maintained but, as already referred to, the inability of the sub-soil to absorb water makes the servicing of this system extremely difficult during very wet weather. The Public Health Inspectors have received every co-operation from the operators of the circuit and although a few complaints are received from people visiting the track, it is only fair to record that these are infinitesimal compared with the number attending the main events.

The installation of the automatic screening device on the outfall drainage at the private abattoir and factory at Blisworth has improved matters greatly as far as the operation of the disposal works is concerned especially in the retention of grease. This arrangement, coupled with the method now adopted for storage and disposal of waste products (mentioned elsewhere in the report), has considerably improved the handling and disposal of waste material so that the hygienic condition of these premises has improved considerably.

It is to the mutual advantage of both parties that there is a close liaison and exchange of information between the Council's Chief Public Health Inspector and the River Authority's Pollution Officer. As a result, several persistent problems associated with effluent discharges into brooks and ditches are now being actively pursued by the River Authority. These include the trade effluent discharge from an electronics factory, the farm and domestic effluent discharge from premises at Stoke Bruerne and the discharge from the outfall drain serving an engineering works.

Repairs to the public sewer in Station Road, Blisworth have prevented further escape of sewage from the caravan site. Since the last report two complaints of nuisance from the existing pumping plant on this site were investigated and were soon remedied. Nevertheless, the arrangement for lifting the sewage from the collecting chamber on the caravan site to the Council's sewer is far from ideal and the stand-by arrangement in case of breakdown leaves much to be desired. Although the Council had little choice, having regard to the present financial situation, in deferring the Consultant's scheme for dealing with this area it is felt that the only permanent solution is the installation of a purpose-built pumping station under the control of the Council. It must again be emphasised that the flow of effluent from this property is equivalent in quantity to that for some of the villages in the district which have already been sewered at public expense.

The position with regard to sewerage and sewage disposal in the district can, therefore, be summarised as follows: Blisworth, Cold Higham, Cosgrove, Deanshanger, Gayton, Greens Norton, Litchborough, Old Stratford, Pattishall, Paulerspury, Potterspury, Shutlanger, Silverstone, Stoke Bruerne, Tiffield, Towcester, Whittlebury, Wicken and Yardley Gobion are now sewered; the villages of Abthorpe, Bradden, Slapton, Wappenham, Weston and Lois Weedon are in the joint scheme now being considered by the Ministry; the villages of Adstone, Alderton, Blakesley, Grafton Regis, Maidford and Woodend are in schemes approved by the Council but not yet submitted to the Ministry. This leaves the village of Hulcote, already satisfactorily sewered by a private scheme, and the hamlet of Caldecote where conditions are very unsatisfactory. It may be that the sewerage of the latter could be taken into consideration with

that proposed for the area covering the Daventry Road section of Towcester—reference to which has been made in previous reports.

A few pail closets still need to be converted in villages served by newly laid sewers e.g. Litchborough, Gayton and Pattishall but it has been the experience in several parishes that the last few conversions take some time to achieve. This is a consequence of the fact that such conversions can only be accomplished by persuasion—the alternative involves service of notice under Section 47 of the Public Health Act, 1936 and the payment by the Council of half the cost. Nevertheless, the night soil collection covering these villages has now been discontinued but this service is still being maintained in those villages not having the benefit of a sewerage scheme. As already stated the installation of an appreciable number of settling tanks following modernisation of dwellings, although causing pollution in the watercourses, has nevertheless contributed towards the reduction in the number of pail closets which have to be served by the night soil collection. At the beginning of 1968 only 203 such pails were being serviced.

Public Cleansing—House refuse is collected weekly from each house in the district according to the following rota :

Monday	Wicken, Deanshanger, Old Stratford, Cosgrove, Yardley Gobion, Grafton Regis and Alderton.
Tuesday	Potterspury including Wakefield Estate and Potterspury Lodge, Paulerspury, Astcote, Eastcote, Dalscote, Pattishall including Cornhill, Fosters Booth, Cold Higham, Grimscothe, Litchborough, Maidford and Adstone.
Wednesday	Silverstone, Whittlebury, Wood Burcote, Weston and Weedon, Wappenham, Slapton, Bradden, Abthorpe including Southfields Place.
Thursday	Towcester, Caldecote, Hulcote, Stoke Bruerne, Shutlanger and Heathencote.
Friday	Gayton, Tiffield, Blisworth, Greens Norton including Caswell, Foxley, Seawell Grounds, Blakesley, Woodend and Plumpton.

The scheme is operated by employing two rear loading fore and aft tipping vehicles which incorporate a compression device to increase the holding capacity and to reduce the number of journeys to the disposal point. The proposed introduction of an off-the-premises collection has had to be deferred for financial considerations but the Council are to be congratulated on their decision to order, in the meantime, an additional refuse collecting vehicle with a greatly increased capacity which will again reduce the time involved in emptying refuse at the tip. The use of large vehicles will, of course, be essential when the paper sack scheme is eventually put into operation.

The majority of the house refuse is disposed of by dumping in a disused gravel pit at Wood Burcote. The latter is conveniently situated near the centre of the district but collections made in the vicinity of Maidford—at the northern end of the district—are deposited in an excavation south of that village. Controlled tipping is the method employed at the central tip i.e. as far as equipment and circumstances permit, while at Maidford the refuse is levelled and covered whenever it is possible to spare the earth moving equipment in regular use at Wood Burcote. The difficulty of handling present-day refuse has been expressed in previous reports. The nature of the refuse and the difficulty in obtaining sufficient and suitable covering material present problems at all times but particularly so in the summer months. Spontaneous combustion of

refuse, although useful in reducing bulk, is unfortunately not conducive to good practice in controlled tipping. The summer of 1967 proved to be extremely trying in these respects with the result that the nuisance arising from infestations of flies in the nearby hamlet were attributed to the proximity of the Council's tip despite a concentrated effort by the health department with the aid of liquid, fume and powder insecticide applied during all stages of collection and disposal. It must be emphasised, however, that this was a particularly active year for house, and other species, of flies and infestations were very troublesome all over the country. Nevertheless, the experience emphasises the importance of a systematic approach to the disposal of refuse by the method of tipping. It also emphasises the absolute necessity for having the means available, not only for handling the refuse, but also for excavating and transporting covering material. It seems inevitable that the increasing difficulty being experienced in obtaining sufficient covering material, coupled with the limited number of suitable tipping sites available, will make it necessary in the not too distant future for the introduction of an alternative means of disposal. Such methods include incineration, pulverisation and composting but such a development will need the establishment of larger local authority units, obviously being envisaged by the Royal Commission on Local Government, before it will be economically possible for one of these systems to be made available in this district.

The Council do not maintain a rate-borne service for the issue of dustbins and there are no byelaws in force in the district covering the subject of house refuse collection. For these reasons, the household refuse containers in use in the district are not of a uniform standard although most premises nowadays possess at least one approved type of bin. There still remain in use too many unsuitable containers of various shapes and sizes which are unhygienic and difficult to handle. Although the Council's present scheme is confined to collection from the kerbside, house refuse is collected from premises on request if illness or infirmity due to old age is involved.

The special annual collection from domestic premises of bulky waste not suitable for the ordinary house refuse collection has been maintained and is considered to be one of the most valuable services available to residents in the area. It is also the Council's intention to make provision at the central tip for further facilities to enable ratepayers to dispose of unwanted materials in accordance with the Civic Amenities Act. The Council do not undertake the removal of trade refuse but such refuse is collected on request from some of the larger commercial premises subject to appropriate charges. All business undertakings in the district are allowed to use the central tip under supervision and again subject to appropriate charges.

The reduction in the number of pail closets being served by night soil collection has enabled the Council to offer a free emptying service for all domestic septic tanks. All such tanks are serviced, free of cost, once per annum on request by the owner. Additional emptyings are charged cost plus establishment charges. It would be expedient to point out that this service will have to be maintained even after all the proposed sewerage schemes have been completed and put into operation because there will still be a substantial number of properties outside the effective area of such schemes.

Rodent Control—It is the Council's duty to enforce the provisions of the Prevention of Damage by Pests Act, 1949 in the district. In order to comply with the requirements of this Act, a full-time operator is employed not only for carrying out actual treatments but also to undertake regular surveys of land and buildings. It has recently been found necessary to reorganise the service in order to meet with changing circumstances and in order to incorporate new methods of treatment. The scheme provides, inter alia, for more frequent visits to contract work, a partial or complete treatment to all sewers within an eighteen months cycle, uninterrupted control of refuse tips and other known trouble spots and systematic general surveys in various parts of the district. The abolition of the charge of 1/- per visit has enabled the domestic premises to be treated as a rate-borne service and this commendable decision by the Council has contributed greatly to the efficiency of the service as a whole. The number of premises being dealt with under contract during 1967 was 18 and business premises not in that scheme are treated on a time cost basis plus 10% establishment charge. A subsequent table records the actual work carried out during the year.

Disinfection—Terminal disinfection is no longer practiced as a matter of course because it is considered unnecessary in the case of the common infectious diseases. Nevertheless, it is carried out on request or when special considerations make it necessary. In such circumstances premises, clothing and bedding are treated by use of gaseous and liquid disinfectants.

Disinfestation—Insects—The summer of 1967 proved to be particularly troublesome for common house flies on the Council's refuse tip. Considerable attention was given by the Public Health Inspectors to this problem and although the level of infestation never reached great proportions, it proved to be persistent because every fresh load of refuse was, in effect, a new infestation. Although the refuse collectors were instructed to use an applicator for insecticide on the vehicles during the course of each collection it was still found essential to deal with the refuse as it was in the process of being dumped. Properties in the hamlet of Wood Burcote were also given attention at the request of the owners because of the possible effect of the tip on the level of the fly infestation in these nearby premises. Earlier in the year, swarms of cluster flies invaded several properties in the district, including Wood Burcote, although there was no association between this trouble and the disposal of house refuse. The cluster flies were eventually cleared after great difficulty and much experimenting with various insecticides. Specimens of the insects involved were submitted for examination by the Chief Public Health Inspector who was advised by the entomologist as to the possible method of attack having regard to the complicated life cycle of these insects. There is no doubt that the level of the common house fly infestation at the refuse tip could be very much reduced if the refuse was stored in properly constructed dustbins of an approved pattern with closely fitting lids. There is no doubt also that the weekly interval between each collection almost guarantees that most of the hatching flies find their way to the disposal point. It is clear, therefore, that this is one aspect of environmental hygiene in which the introduction of a paper sack collection could play a vital part. It should also be mentioned that

the difficulties experienced at the Maidford tip are greater as regards fly infestation control for obvious reasons.

Factories Act, 1961—The total number of factories on the register in 1967 including power and non-power factories and works of building and engineering construction was 111. No outworkers were notified as operating in the district during the year and details of inspections etc. are to be found in a subsequent table.

Offices, Shops & Railway Premises Act, 1963—It is pleasing to be able to report that all registered premises in the district have now been inspected. In fact, all likely premises in the district have been surveyed so that it can be safely stated that the Council's register of premises for the purposes of this Act is comprehensive.

The total number of premises registered at the end of 1967 was 87 being two less than that of the previous year—there were actually five new registrations.

It is evident from the subsequent table that the total inspections carried out during the year amounted to 139. This figure includes inspections made in following up notices or verbal instructions. At least one visit was paid to each of the registered premises during 1967.

One formal and 34 informal notices covering 98 separate items were served on occupiers of registered premises but the majority of the infringements related to lack of equipment such as thermometers and first-aid kits—similar to those found in the previous year. There were several of the occupiers who, in each instance, decided that the cost of alteration, mainly concerned with the provision of washing facilities and sanitary accommodation, was not justified. The result was that the use of the particular premises was discontinued as far as the Offices, Shops and Railway Premises Act was concerned. Three cases were dealt with involving re-decoration and lack of cleanliness, two involving general repairs and four instances where wash-hand basins with hot and cold water had not been provided. A number of the premises have not yet been re-inspected where notices are outstanding.

It should also be recorded that all plans submitted for approval under the Building Regulations, where the proposals indicate that the new premises may be subject to the Offices, Shops and Railway Premises Act, are scrutinized by this department and advice given to developers before plans are approved.

No cases of overcrowding came to light during the year and no accidents were reported.

Moveable Dwellings—The Council do not themselves own or operate any caravan sites but there are seven licences in force under the Caravan Sites and Control of Development Act, 1960 for privately run sites. Three are in respect of single caravans the remainder being multiple sites. Three of the latter have licences for residential and one for holiday caravans. The duration of each licence depends on the period of validity of the respective planning consent—the latter being a pre-requisite before a licence can be issued. The single sites have consents which are limited in duration ; all but one of the larger sites have licences in perpetuity,

the exception having a licence which expires ten years from the date of issue.

The holiday caravan site, situated at Cosgrove Lodge Park, is in use annually from 1st April to 31st October and has a capacity of 120 caravans. The site is well conducted and amply provided with amenities to a standard above that laid down in the Ministry's Model Conditions.

Improvements to one of the residential sites at Towcester are still proceeding the position now having been reached where practically all the caravans within the effective area of the public sewer have been provided with internal services. The site operator is now contemplating the installation of a sewage ejector so as to enable the remainder of the caravans on the site to be provided with foul drains and consequently will allow these caravans to be fitted with internal services. The maximum number of caravans allowed on the site is 40.

The site at Blisworth, which will hold approximately 80 caravans is so laid out so as to be capable of providing internal services to all the moveable dwellings on the site, but, as it is well known, most of the drainage enters the public sewer via a sewage lift owned and operated by the site operator. The caravans on this site are gradually being replaced by more modern versions with all internal amenities.

The unsatisfactory condition of the remaining residential site at Towcester still causes much concern. As the Council are aware, a final effort has been made to persuade the owner to conform to the licence conditions and generally to improve the site. The licence has also been amended so as to make it possible for the owner to meet some of the more difficult problems associated with this site. The site in question is very badly situated from the point of view of both foul and surface water drainage and it is impossible to provide any appreciable standard of amenity on this site unless it is provided with a comprehensive drainage system including means of lifting the sewage to the public sewer. It must be emphasised, however, that this site, just as in the case of the others, is provided with ablution and sanitary accommodation to the standard required by the Model Conditions but, in this particular instance, these amenities are far less accessible. It is to be hoped that the undertaking given by the owner to comply with the licence conditions will be honoured and maintained. The site has a maximum capacity of approximately 36 caravans.

Complaints were received during the year from occupants of caravans on all the residential sites but the majority came from the last mentioned.

Animal Boarding Establishment Act, 1963—This Act provides for the licensing and supervision of kennels and catteries from the point of view of structure and maintenance of buildings and the welfare of the animals generally. Three boarding establishments in the district are registered under the Act, one as a cattery another as kennels and the third for both purposes. Regular inspections of the premises are carried out particularly during the holiday season and as far as the requirements of the Act are concerned there has been no cause for complaints.

Cinemas and Halls—The one cinema in the district is fitted with an efficient mechanically operated heating, ventilating and air conditioning system and is well provided for as regards sanitary accommodation.

Further improvements have been made to the existing conveniences used in conjunction with Town Hall lettings but it is regretted that the facilities available are still not up to the accepted standard neither in number nor amenity.

The work of providing kitchen and internal sanitary accommodation at the village hall at Litchborough has been completed so that all village halls in the area are now satisfactorily fitted up as regards these facilities except the few situated in unsewered areas. The department examines all plans submitted for approval under Building Regulations especially where buildings are intended for public refreshment or entertainment. This ensures that matters involving hygienic considerations such as sanitary accommodation, personal washing accommodation and the requirements of the Food Hygiene Regulations, are incorporated in the design.

Drainage of Trade Premises Act—The public health department undertakes the practical administration of this Act including the collection and submission of samples of effluent for analysis. There are five consents in force under the Act (as amended by the Public Health Act, 1961) which determine the conditions according to which trade effluent is accepted in the public sewers from industrial premises. Comments in previous reports have been made regarding the unsatisfactory effluent being received from a private abattoir and meat products manufacturing premises so it is now pleasing to be able to report that due to the efforts of the public health department and the co-operation of the management, the quality of these effluents have now been improved considerably thereby producing a corresponding improvement at the Council's sewage disposal works.

Farm premises discharging farm effluents into the public sewers were brought within the scope of the Drainage of Trade Premises Act by the Public Health Act, 1961. Variations in existing, and applications for new, discharges from such premises resulted in a number of surveys having to be made during the year by the Public Health Inspectors. There were also three cancellations leaving a balance of 18 consents still in force at the end of the year in respect of farm effluents.

Clean Air Act, 1956—The last commercial chimney in the district which served a solid fuel furnace has now been demolished. All remaining industrial chimneys are used in conjunction with gaseous or oil fired installation and have given no cause for complaint.

Several complaints arising from smoke emitted from domestic chimneys were received and investigated—one in particular has been very persistent—but as these are not covered by the Clean Air Act there was very little the department could do except give appropriate advice to the parties involved.

Complaints were also investigated regarding nuisance from open fires in gardens and on commercial premises. Contrary to belief, the lighting of such fires is not in itself an offence as far as the Act is concerned because the district has no smokeless zones. On the other hand, open fires of this kind can be dealt with under the Public Health Act, 1936 if circumstances are such that the smoke emitted amounts to a statutory nuisance. Fires on commercial premises for the purposes of burning trade and

industrial waste are best dealt with under planning legislation. Nevertheless any such complaint—motor car repair shops are the usual offenders—are investigated by the public health department and up to the present each case has been settled informally.

Statutory Nuisances—The majority of nuisance complaints investigated during the year concerned disrepair of domestic and other premises, defective drains and sewers, accumulation of refuse and other discarded materials, dangerous buildings and nuisance from ditches, ponds and disused canals. Instances reported and not otherwise recorded or enumerated in other parts of this report, numbered 120. It was not found necessary to serve any formal notices in respect of these matters but it should be emphasised that although all complaints have to be investigated there are inevitably some which do not, in the opinion of the department, fall within the definition of “statutory nuisance”. For the latter reason complainants are often aggrieved particularly when advised that the proper course of action is one of private injunction. The number of visits made for the purpose of investigating and dealing with the complaints mentioned amounted to 340.

No complaints were received, during the year, of nuisance from noise arising from any industrial premises but alleged disturbance to nearby residents by noise resulting from music and dancing at a village club made it necessary for observations to be kept on evenings and weekends when the hall was being used for this purpose. The co-operation of the hall management was sought in order to keep the emission of sound within reasonable limits and the approach resulted in a considerable improvement.

The individual reaction, in any group of people, to the same noise source can vary greatly from person to person although it has been found from experience that there is usually general agreement as to the nuisance level of an industrial, or similar, noise. On the other hand enquiries into alleged nuisance from sources such as musical instruments or natural sounds, such as barking dogs, usually yield widely differing opinions which emphasise the subjective nature of the sensation of sound. For this reason it is felt that annoyance to persons arising from this last mentioned type of noise source can best be dealt with by private injunction, or, alternatively, by three or more aggrieved persons taking action under the Noise Act.

Scrap Metal Dealers Act, 1964—The public health department attends to the registration of these premises and carries out any necessary inspections for the purpose of discovering whether any premises are used for the storage of scrap metal. During 1967 nine premises were registered for this purpose.

Petroleum Storage Licences—There are 79 licences in force in the district issued under the Petroleum Act, 1928 and covering the storage of petroleum spirit on 77 premises and the storage of petroleum mixtures on two premises. These licences enable the Council to enforce fairly stringent conditions for the safe storage and handling of petroleum spirit and mixtures. As mentioned in the previous year's report, a comprehensive survey of these premises is overdue and it is pleasing to be

able to report that the majority received a general inspection during the year. Except in the case of new installations, no storage tanks were tested nor electrical circuits examined—two items which really need attention as soon as time and staff permit.

The duties involved in this aspect of the department's activities are perhaps not as well known as those concerning environmental hygiene. Nevertheless, in view of the comprehensive Code of Principles now laid down by the Home Office and of the sophisticated apparatus being introduced for the storage and dispensing of petroleum spirit, the amount of time having to be spent on administering the Act and Regulations is now quite substantial. Furthermore, it is essential that the staff receive instruction on the new techniques involved and for this reason the Council's membership of the Association for Petroleum Acts Administration has proved invaluable.

There are special problems in this district associated with this subject for which we are having to develop our own methods of approach, namely, the storage and handling of petrol on the Silverstone motor racing circuit. The most recent problem which has had to be faced is the demand for refuelling at pit stops—an operation which, being subject to so many hazards, has, up to the present, been successfully discouraged by the Petroleum Officer. Attendance by one of the Public Health Inspectors has always been necessary at major events in order to check on the handling of petrol but this latest development will need much more supervision and further negotiation on this subject will need to be arranged between the Petroleum Officer and the track officials before the commencement of the next racing season.

SECTION D.

HOUSING

The number of Council houses occupied in the district at the end of 1967 was 1,875 an increase of 18 over the previous year. Despite much activity on the part of private developers in recent years, these numbers are significant in that Council houses still form more than one quarter of the dwelling accommodation in the area. It is estimated that the greater proportion of the privately owned properties are owner/occupied, consequently the Council owned houses represent the majority of the houses in the district available for renting. This undoubtedly results from the existing trend whereby almost all privately owned houses, as soon as they are vacated by the tenant, are placed on the market. The Rent Act, 1965 has probably helped to encourage this tendency particularly in view of the high cost of new building and of the increasing opportunity for many more people to live in the country and commute to other areas of employment—even as far distant as London.

The new Council house building took place in Deanshanger and Potterspury. The warden-controlled flatlets for old people at Towcester continued to successfully meet the accommodation of elderly persons intermediate between ordinary Council housing and geriatric units of the type recently opened by the County Council at Towcester.

For the time being, owing to national economic restriction, further building of local authority houses in the district has been confined to Towcester and Blisworth where 48 and 20 houses are respectively in course of construction. While the latter are, of course, being constructed to the Parker Morris standard, the older Council houses are not being neglected. During 1967 a further 68 were modernised making the total to-date 654. This work is still continuing and included in the 1968 programme is the reconditioning of the pair of cottages at Potterspury which were purchased by the Council from private ownership.

The drop in the number of improvement grants which occurred in 1966 was not reversed during the current year. The actual number of applications approved in 1967 was 37—only one more than in the previous year. The reference made in an earlier paragraph to the increasing proportion of owner/occupied accommodation seems to receive confirmation from the fact that there were no applications for discretionary grants during the year for improvement to tenanted properties—there were seven for owner/occupied. Similarly, the proportion of tenanted properties in receipt of standard grants was about one quarter, i.e. 23 owner/occupied to seven tenanted. It is possible that the promised amended legislation on this subject with its proposed increased grants will prove a greater incentive towards the modernisation of old properties. The latter could, however, prove to be a mixed blessing in those villages lacking proper sewers. Nevertheless, it must not be forgotten that the present scheme has been instrumental in achieving the improvement of 482 properties many of which may have otherwise been “condemned”.

Several houses have been improved during the year without the aid of grants and it is estimated that approximately 650 dwellings in the district now remain which have not been equipped at least to the extent of the five standard amenities. Even among these, however, it is believed that more than 300 have either a w.c. (not necessarily internal) or hot water over a sink. In some of these instances both amenities exist.

As stated in the previous report, a great deal of slum clearance work has been carried out in the past and records show that 1,153 houses have been the subject of action under the Housing Acts. Although, as stated above, a number of dwellings still remain in the borderline category, most are sub-standard merely because of the lack of modern amenities. The process of dealing with the former is, therefore, still continuing either as the properties become empty or when the state of disrepair becomes serious. Because of the work already carried out, the number of unfit houses is obviously only a fraction of the number which used to be dealt with. Nevertheless, nine unfit houses received attention individually under Section 16 Housing Act, 1957 resulting in seven closing orders and two demolition orders being made during the year. In consequence of action taken in previous years, seven houses were demolished by owners in compliance with demolition orders and two were demolished by the Council in default of the owner who could not be traced. Undertakings to make fit in respect of four cottages were determined after work had been carried out to the satisfaction of the Council, five demolition orders were rescinded for the same reason and two variation orders in respect of three properties subject to pre-war clearance areas in Silverstone and Potterspury were made by the Ministry on the advice of the Council. No certificates of disrepair were issued during the year.

As predicted in last year's report a record number of private houses were completed in the district during 1967, namely, 318 and building of houses for sale is continuing at Blisworth, Cosgrove, Deanshanger, Old Stratford, Pattishall, Silverstone, Towcester and Yardley Gobion.

Provision of new Housing Accommodation

(a) PERMANENT HOUSES

Erected by Council pre-war	...	...	...	...	719
Erected by Council post-war	...	...	...	...	1,156
Completed during 1967	...	...	...	...	18
Under construction at 31/12/67	...	...	...	...	48
Erected by private enterprise post-war	...	...	...	...	1,331
Erected by private enterprise in 1967	...	...	...	...	318

(a) PERMANENT HOUSES

(b) TEMPORARY HOUSES

Number completed to 31/12/67	...	...	...	...	30
------------------------------	-----	-----	-----	-----	----

Unfit Houses

Dealt with as individual unfit houses post-war to 31/12/67	...	...	...	...	400
Dealt with in Clearance Areas post-war	...		...	...	—
Dealt with in Clearance Areas and still occupied	...	...	...	...	2
Demolished since 1945	...	...	...	...	580
Subject to Undertakings and Closing Orders at 31/12/67	...	...	...	...	81
Vacant and awaiting demolition at 31/12/67	...	...	...	...	27

Improvement Grants

(a) DISCRETIONARY GRANTS

Houses in respect of which improvements were completed by					
31/12/67					
Occupied by tenants	...	...	...	...	94
Owner/occupiers	...	...	...	...	100

(b) STANDARD GRANTS

Houses in respect of which improvements were completed by					
21/12/67					
Occupied by tenants	...	...	...	...	86
Owner/occupiers	...	...	...	...	202

SECTION E.

INSPECTION AND SUPERVISION OF FOOD

Milk Supply—Control of the retail distribution of milk in the district is effected through the Milk and Dairies (General) Regulations, 1966. Producer/retailers are outside the jurisdiction of the rural council although controlled by the same legislation—the inspection of their premises is within the province of the Ministry of Agriculture, Fisheries and Food. Three producer/retailers are still in operation in the district.

Retail distributors must register their premises with the local authority and in the Towcester rural district twelve such registrations are in force. Distributors who retail within the area are permitted to do so, despite the fact that their premises are situated outside, by virtue of the registration in the district where they are based.

Nowadays, milk sold to the public must fall into one of three designations, namely, “ Untreated ”, “ Pasteurised ” and “ Sterilised ” and containers have to be properly labelled and capped according to the provisions of the Milk (Special Designation) Regulations, 1960 and 1963. In order to be able to deal in any particular grade, the dairyman (including the distributor) must obtain a licence from the local authority. There are, however, no heat treatment plants and no wholesale depots in the rural district so that the concern of the department is confined to retail distribution.

Dealers licences in force in the district are as follows :

Milk (Special Designation) Regulations, 1960 and 1963

Licences for sale of pasteurised milk	...	...	...	12
Licences for sale of sterilised milk	...	...	...	7

Licences are valid for five years, the current licences expiring on the 31st December, 1970.

The sampling of the milk supply throughout the district is carried out by the Public Health Inspectors in order to ensure compliance with the standard of bacteriological quality demanded by the special designations. In addition samples, regularly obtained from producer/retailers, undergo examination for the presence of the organism causing contagious abortion in cattle and undulant fever in man. Any positive results from the preliminary tests necessitate the taking of further samples in order to isolate the animal or animals concerned. In the case of a large herd such an investigation can absorb a considerable amount of the inspector's time. Apart from regular sampling of milk from producer/retailers a number of samples have also been taken from herds supplying concessionary milk to workers on large estates and also to a private school. A total of 26 samples of milk were submitted to the Brucella ring test ; 22 of these were negative and four positive, the latter indicating the presence of Brucella Abortus organisms. One follow-up biological sample gave a positive result and the infected animal was isolated.

One sample of “ Untreated ” milk submitted to the methylene blue

test proved to be unsatisfactory but all of the remaining 25 samples of Untreated, Pasteurised and Sterilised milk reached the required standard.

Food Premises—Food premises in the district which are subject to the provisions of the Food Hygiene (General) Regulations, 1960 are as follows :

Village and general stores	...	...	...	58
Greengrocers and fruit shops	...	...	...	5
Bakehouses	...	...	...	6
Fried fish shops	...	...	...	2
Bread and confectioners' shops	...	...	...	12
Cafes	...	...	...	9
Transport Cafes	...	...	...	4
Cooked meat manufacturers	...	...	...	1
Hotels with catering facilities	...	...	...	5
Butchers' shops	...	...	...	9
Private Hotels	...	...	...	4
Canteens	...	...	...	13
Slaughterhouses	...	...	...	2
Licensed Premises	...	...	...	46
Wine and Spirit blending and bottling	...	...	...	1
Ice-cream Premises	...	...	...	73
Towcester Racecourse—restaurants etc.	...	...	...	7
Silverstone Racing Circuit—restaurants etc.	...	...	...	4

All food premises received at least one visit during the year, minor infringements were dealt with informally but it was found necessary to serve notice in respect of one bakehouse and one general store requiring the provision of washing facilities, hot water supplies and certain repairs. At the end of the year, the majority of the work had been carried out and it is now pleasing to be able to report that the requirements of R.16 (provision of wash-hand basins) and R.19 (provision of sinks) have now been complied with on all premises selling open food. As a consequence of pressure by the public health department, one large multiple store decided that it would be difficult to comply satisfactorily with both the Food Hygiene Regulations and the Offices, Shops and Railway Premises Act in their existing premises. The result was the erection of a new modern store in which the requirements of the Act and the regulations were not only complied with but surpassed. Close consultation continued between the Chief Public Health Inspector and the firm's architect from the design stage to the completion of the building and all parties are very pleased with the result.

A total of 29 informal notices were served upon the occupiers of food handling premises and all were satisfactorily complied with. Every opportunity is taken by the Public Health Inspectors to impress upon food handlers the importance of maintaining a high standard of hygiene at all times and premises known to be weak in this respect received frequent visits. The latter also applies to premises where the processes involved are particularly prone to risk.

The factory manufacturing meat products falls into the latter category and for this reason, a considerable amount of attention is given by the Public Health Inspectors to this particular establishment. A number of difficulties have arisen in practice regarding the methods employed in processing the various meat by-products on these premises and the management and staff are constantly reminded of the absolute

necessity for the most stringent care to be taken and scrupulous cleanliness maintained at all times particularly when existing processes are altered or new techniques are introduced. A number of structural alterations have also had to be carried out in order to comply with the department's requirements and there are further modifications to the structure which the proprietors have been requested to attend to. The Chief Public Health Inspector has emphasised the need to the management for a quality control section to be established because of the considerable expansion of the business and of the recent introduction of the products of an overseas company who are now operating from the same premises.

There is no doubt that constant vigilance on the part of the public health inspectorate has been largely responsible in limiting the number of adverse reports to two out of a total of 217 samples of the products of this factory submitted for bacteriological examination. The bacteriological standard of the manufactured foods leaving this factory were exceptionally good during the year and it is only fair to add that the two adverse reports referred to "scanty growths" of a minor organism. The coding system adopted by the firm on the advice of this department has been working very well and has proved its worth in a number of instances where pies etc. have been the cause of complaint. In each instance the code clearly indicated the neglect of the retailer to introduce a proper stock rotation.

During 1967, four cases involving the sale of food were reported to the Council. The commodities included sweets, cakes and meat pies. The first two were dealt with informally by the issue of warnings to the retailers and manufacturers concerned but the seller of the meat pies, which were in a mouldy condition, was prosecuted and fined.

Food Stalls and Delivery Vehicles—Stalls and other mobiles where food is handled are now subject to the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966. All vehicles plying in the district from which food is delivered or sold received at least one inspection during the year. Twenty seven informal notices were served upon the proprietors of such vehicles requiring certain equipment to be provided in compliance with the regulations. All were eventually complied with—in some cases by the provision of new vehicles. Experience has shown that the majority of vehicles used by vendors for selling food are basically unsuitable for the purpose and for this reason difficulty is met with in the adaptation of these vehicles. Several enterprising dealers have become aware of this fact and have invested in purpose-built vehicles which, from the hygiene angle have been admirably designed by the manufacturers. The time must surely come when street trading in food can only be permitted from purpose-designed vehicles.

One of the greatest difficulties often met in controlling mobiles, from the point of view of the hygiene regulations, is the lack of any form of registration. Businesses frequently change hands and vehicles are often replaced (usually by other second-hand vehicles) without the necessity of giving any notice to the local authority. It can be appreciated that keeping track of these mobile businesses is not an easy matter particularly as there is unrestricted movement from one district to another. The milk distributor has to be registered with the local authority so there

seems to be no reason why any other branch of food vending should not be treated likewise.

The regulations apply to stalls and marquees serving food and drink on the Silverstone race track and the Towcester racecourse and a substantial amount of time has been spent by the department in ensuring that all the various food selling points on both courses are fitted out to comply with the requirements of the regulations. The willing co-operation of both managements must be put on record in view of the considerable amount of work which has been carried out by them at no small expense. The British Racing Drivers' Club found it necessary to extend the existing permanent restaurant and to re-design the remainder in addition to giving attention to the various temporary vending points. The Towcester Racecourse Company erected a new bar and carried out alterations to a kitchen and various other food premises on the track. In both instances actual catering is undertaken by outside contractors which makes it essential for the Public Health Inspectors to attend all events although the work falls outside normal working hours. The appointment of a second Meat Inspector has undoubtedly eased the burden to a great extent. Previously it was found impossible to carry out week-end abattoir duties and at the same time attend at Towcester or Silverstone.

Slaughterhouses and Meat Inspection—The slaughtering of animals for human consumption continues to be carried out in the district from two premises—a small private slaughterhouse at Potterspury and a large private abattoir at Blisworth. The latter continues to yield one of the largest throughputs of animals in this part of the Midlands.

It was anticipated that during 1967 the figure of 100,000 would be exceeded for the first time but the severe restrictions imposed by the foot and mouth epidemic curtailed the number of animals available for slaughter. Nevertheless, the year's kill amounted to 92,514 almost the same as in the previous year. The epidemic, in addition to keeping down numbers, had the unfortunate effect of irregular deliveries at the abattoir thus causing difficulties for the Meat Inspectors because of the longer hours arising from the necessity for immediate slaughter. The number of animals slaughtered during 1968 promises to be a record. The increased daily kill has been maintained up to the time of writing so that the year's total is likely to be well over the 100,000 mark.

To meet with the increased production, the abattoir is being extended by the addition of new chill and offal storage rooms. The latter will facilitate the inspection of viscera but by speeding up the throughput will result in greater pressure upon the Meat Inspectors. A number of structural defects and alterations, which the Chief Public Health Inspector has taken up with the management, are outstanding and, in particular, proper accommodation for the cutting of meat is a subject that is being actively pursued at the moment.

It is apparent from the subsequent table, which gives information regarding slaughtering and the incidents of diseases in animals, that a surprisingly high number of carcasses have an organ or part condemned. There is also a definite increase, over the previous year, in the percentage of pigs affected with tuberculosis. The latter seems to have been the trend in other slaughterhouses but it is extremely rare to find a whole

carcase condemned because of this disease. The weight of meat and offal condemned, namely, 260 tons illustrates quite forcibly the need for this service.

Condemned Meat—As already stated, the quantity of condemned meat to be disposed of is on the increase but, at the moment, the provisions for dealing with its disposal are satisfactory. This waste is collected by an approved dealer and processed into fertilisers by plant situated in another area. The service has been improved of late by the use of bulk containers such as are used on Northampton market which are frequently removed and serviced. This method has been found to be so successful that most solid waste leaving these premises is dealt with in a similar manner. Bovine livers affected with fluke are separately collected and used for pharmaceutical purposes. The disposal of blood, however, continues to be a problem which is likely to become serious unless a better outlet is found for its disposal.

The quantity of other foodstuffs voluntarily surrendered to the Public Health Inspectors is also mentioned in a subsequent table. This is removed before a condemnation note is handed over and taken to the Council's tip for burial.

Ice-cream—73 premises were registered for the storage and sale of ice-cream under Section 16 Food and Drugs Act, 1955. With one exception all ice-cream sold from these premises is pre-packed, and in each case the ice-cream is stored in thermostatically controlled refrigerating cabinets, complying with the Ice-cream (Heat Treatment) Regulations, 1959. In the case of the one exception the product is sold in the form of soft ice-cream produced on the premises.

SECTION F.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES

There was an increase in infectious diseases notifications of 260 last year to 305 this year, this was largely due to measles notifications which rose from 164 to 273 this year. Scarlet fever notifications fell from the high figure of 73 last year to 12 in 1967.

Measles—There were 273 cases, the majority occurring in the spring. This highly infective illness from which few individuals escape has its incidence almost exclusively during childhood. It usually follows a biennial incidence, with high numbers occurring in alternative years. The course of the illness is almost invariably benign, but complications which include otitis media, pneumonia, eye infections and very occasionally encephalitis do occur, and the illness itself is often severe. Complications can be effectively dealt with by the many antibiotics which are now available, but these drugs are themselves not all without side effects, are expensive and involve medical supervision. An effective measles vaccine has now been developed and it is anticipated that this will be available for general use during the course of the next year, and it is anticipated that in future years measles in common with poliomyelitis and diphtheria will be virtually eradicated.

Whooping Cough—There were 14 notifications. Acceptance rate to immunisation is high and the incidence of this condition is low. Cases still occur as immunisation is not completely effective. However, in the majority of children who have received immunisation the illness is usually mild.

Scarlet Fever—12 cases were notified. This disease continues to exhibit its mild phase. The principal interest in its notification is that it gives some indication of the degree of streptococcal infection in the community.

Poliomyelitis—No cases occurred, and this freedom can be ascribed to immunisation as the decline in incidence has occurred concurrently with vaccination. The oral Sabin vaccine is now used which gives a longer lasting immunity than the Salk or injected variety. A drink of syrup or a lump of sugar is also much more acceptable to the young patients than the previous needle prick.

Food Poisoning—There was one case.

The condition is usually caused by one of the *Salmonella* organisms, of which there are a large number. The commonest strain being that of typhimurium. *Salmonella* infection is common in bovines, and the incidence of infection on farms is now notified by the Divisional Veterinary Officer to the Medical Officer of Health. Farm workers are then warned

of the possibility of human infection, and given details of hygiene precautions to prevent incidence in themselves or their families.

Other causes of food poisoning are staphylococcus which may gain entry to food from an infected spot on the face, hands or arms of a food handler which may cause a severe form of the illness. As the symptoms result from a toxin which is unaffected by heat, cooking the infected food, in this case does not prevent the illness. More rarely typhoid fever, botulism or chemical contaminants may occur. However the commonest germ is the salmonella which gains entry into food because of the faulty personal hygiene of food handlers. The sources of infection are numerous, probably uncooked contaminated (often imported) meat being to-day one of the most frequent.

Smallpox—There were no cases. The vaccination of children is still necessary and should be carried out sometime during the first two years of life, preferably between the first and second year.

Diphtheria—There have been no cases of diphtheria in Northamptonshire since 1956. There is therefore with each successive year of freedom from infection, a diminishing recollection of the dangers of this illness. Mothers without knowledge of the disease feel a false security and may not have their children immunised. That this is a dangerous situation cannot be too strongly stressed, as it is only by keeping up the numbers of children immunised that the disease be kept in check. It is the duty of all parents to have their children immunised, and if they fail to do so they neglect their welfare.

Sonne Dysentery—There were no cases notified during the year.

Infective Hepatitis—The Minister of Health gave sanction that this disease should be made locally notifiable as from 1st July, 1962. By arrangement with other District Councils this also became operative in the County of Northamptonshire. Two cases were notified during the year.

Acute Infective Hepatitis is a disease caused by a virus, which attacks the liver and causes jaundice. It is mainly an infection of young people of faecal-oral spread and with an incubation period of 15-50 days. The incriminative routes of infection are from food handlers, water and children to their mothers. The virus is present in faeces 16 days before jaundice, and up to 8 days after. Serum hepatitis, which is another form of infective hepatitis, has a longer incubation period of 50-160 days and affects mainly adults and can be spread by blood transfusion and inefficiently sterilised equipment used by doctors, dentists, nurses and drug addicts, and in the various tattooing processes. The clinical groups of these two types of hepatitis are indistinguishable. There is no specific treatment and a jaundiced adult would be away from work from six weeks to two months, and sometimes might not feel really fit for a year. Quarantine measures are of little value, and patients can be treated at home or in hospital provided adequate hand washing techniques are practised, with current disinfection of excreta. Serum hepatitis can be virtually abolished, if disposable equipment is used by the County Health Department for all procedures involving immunisation. Gamma Globulin

is of value for the protection of close contacts and pregnant women during epidemics.

Tuberculosis—Vaccination is offered against tuberculosis by the County Council to all children at 13 years of age. This is carried out in the schools and there is a high acceptance rate.

There was one new pulmonary case notified during the year, one male. There were two inward transfers of pulmonary tuberculosis, one male, one female. No deaths from tuberculosis were registered during the year.

The number of cases remaining at the end of the year is as follows :

PULMONARY			NON-PULMONARY			GRAND TOTAL
<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	
35	32	67	13	9	22	89

SECTION G.

STATISTICAL TABLES, 1967.

TABLE No. 1

CAUSES OF DEATH, 1967

<i>Causes of Death</i>						<i>Males</i>	<i>Females</i>	<i>Total</i>
1.	Tuberculosis, respiratory	...	...	...	...	—	—	—
2.	Tuberculosis, other	...	...	...	...	—	—	—
3.	Syphilitic disease	...	...	...	...	—	—	—
4.	Diphtheria	...	...	...	...	—	—	—
5.	Whooping Cough	...	...	...	...	—	—	—
6.	Meningococcal infection	...	...	...	...	—	—	—
7.	Acute poliomyelitis	...	...	...	...	—	—	—
8.	Measles	...	...	...	...	—	—	—
9.	Other infective and parasitic diseases	...	...	...	...	—	—	—
10.	Malignant neoplasm, stomach	...	...	...	...	2	1	3
11.	Malignant neoplasm, lung, bronchus	...	...	...	...	8	—	8
12.	Malignant neoplasm, breast	...	...	...	...	—	2	2
13.	Malignant neoplasm, uterus	...	...	...	...	—	3	3
14.	Other malignant and lymphatic neoplasm	...	...	...	...	6	10	16
15.	Leukæmia, aleukæmia	...	...	...	...	—	—	—
16.	Diabetes	...	...	...	...	1	—	1
17.	Vascular lesions of nervous system	...	...	...	...	4	18	22
18.	Coronary disease, angina	...	...	...	...	21	17	38
19.	Hypertension with heart disease	...	...	...	...	1	3	4
20.	Other heart diseases	...	...	...	...	11	18	29
21.	Other circulatory disease	...	...	...	...	3	3	6
22.	Influenza	...	...	...	...	1	—	1
23.	Pneumonia	...	...	...	...	4	3	7
24.	Bronchitis	...	...	...	...	4	3	7
25.	Other diseases of respiratory system	...	...	...	...	1	—	1
26.	Ulcer of stomach, duodenum	...	...	...	...	1	—	1
27.	Gastritis, enteritis, diarrhoea	...	...	...	...	—	1	1
28.	Nephritis and nephrosis	...	...	...	...	1	—	1
29.	Hyperplasia of prostate	...	...	...	...	—	—	—
30.	Pregnancy, childbirth, abortion	...	...	...	...	—	—	—
31.	Congenital malformations	...	...	...	...	—	—	—
32.	Other defined and ill-defined diseases	...	...	...	...	2	3	5
33.	Motor vehicle accidents	...	...	...	...	3	2	5
34.	All other accidents	...	...	...	...	2	—	2
35.	Suicide	...	...	...	...	—	—	—
36.	Homicide and operations of war	...	...	...	...	—	—	—
ALL CAUSES						76	87	163

TABLE No 2

VITAL STATISTICS FOR 1967 AND PREVIOUS YEARS

Year	Estimated population	Births		Deaths			
		No.	Rate	Under one year		All ages	
		No.	Rate	No.	Rate	No.	Rate
1919	*9,387 †9,011	156	16.61	7	44.87	158	17.53
1920	9,370	259	27.64	15	57.90	146	15.58
\$1921	9,920	211	21.27	21	99.52	131	13.20
1922	9,937	172	17.30	9	52.32	136	13.68
1923	9,944	171	17.19	9	52.63	120	12.06
1924	10,000	162	16.20	9	55.50	115	11.50
1925	9,959	150	15.06	8	53.33	123	12.35
1926	9,870	152	15.40	5	32.89	116	11.75
1927	9,887	144	14.56	8	55.55	115	11.63
1928	9,502	134	14.10	4	29.85	120	12.63
1929	9,398	139	14.79	6	43.16	138	14.68
1930	9,384	115	12.25	8	69.56	129	13.74
\$1931	9,324	131	14.04	7	53.43	104	11.11
1932	9,324	118	12.65	0	00.00	114	12.22
1933	9,271	147	15.85	4	27.21	96	10.35
1934	9,200	114	12.39	5	43.80	132	14.34
1935	†13,155	180	13.67	7	38.88	181	13.75
1936	13,040	210	16.10	10	47.60	165	12.60
1937	12,900	170	13.20	9	52.90	197	12.30
1938	12,860	152	11.80	4	26.30	182	14.20
1939	*12,930 †12,020	184	14.20	5	27.11	170	13.06
1940	13,190	184	13.90	7	36.95	219	16.55
1941	14,750	203	13.80	14	68.96	211	14.31
1942	14,050	244	17.40	12	49.18	147	10.47
1943	13,690	254	18.55	14	55.11	193	14.23
1944	13,680	242	17.67	8	33.01	192	14.04
1945	13,500	228	16.14	5	22.80	174	12.88
1946	13,490	273	20.24	13	47.25	178	13.19
1947	13,750	283	20.58	8	28.19	178	12.04
1948	13,910	238	17.11	13	54.62	184	13.23
1949	14,300	255	17.38	8	31.37	179	12.59
1950	14,470	217	15.00	7	32.25	197	13.61
\$1951	14,540	230	15.73	11	47.82	197	13.47
1952	14,490	219	15.1	7	31.9	171	11.8
1953	14,410	241	16.7	2	12.4	144	9.9
1954	14,440	230	15.9	7	30.4	181	12.5
1955	14,490	208	14.3	3	14.4	172	11.8
1956	14,450	250	17.3	6	24.0	193	13.3
1957	14,420	221	15.3	5	22.6	155	10.7
1958	14,410	262	18.2	7	26.7	188	13.06
1959	14,550	242	16.6	6	24.7	163	11.1
1960	14,660	284	19.3	2	7.0	142	9.6
\$1961	15,370	256	16.6	4	27.3	181	11.7
1962	15,460	250	16.17	6	24.0	173	11.2
1963	15,640	304	19.5	2	6.6	181	11.6
1964	16,140	304	18.5	6	19.5	184	11.4
1965	16,290	321	19.7	4	12.4	161	9.8
1966	16,460	327	19.8	4	11.0	196	11.9
1967	16,780	340	20.3	3	9.0	163	9.7

* Population for calculation of birth rates.

† Population for calculation of death rates

‡ Potterspury R.D. added to district

\$ Census years.

TABLE No. 3

WATER SUPPLY—INFORMATION RELATING TO PIPED SUPPLIES

<i>Parish</i>	PROPERTIES CONNECTED TO PUBLIC MAINS			PROPERTIES DEPENDING ON PRIVATE SUPPLIES		
	<i>Total no. of houses in parish</i>	<i>No. of houses served</i>		<i>Wells</i>	<i>Springs</i>	<i>No. of houses served</i>
		<i>Internal supplies</i>	<i>Stand pipes</i>			
Abthorpe	91	90	—	1	—	1
Adstone	36	33	—	2	—	3
Blakesley	142	140	—	1	—	2
Blisworth	417	417	—	—	—	—
Bradden	31	29	—	1	—	2
Cold Higham	74	71	—	2	1	3
Cosgrove	161	157	—	3	—	4
Deanshanger	546	544	—	1	1	2
Easton Neston	35	—	—	5	—	35
Gayton	150	145	—	1	—	3
Grafton Regis	72	67	—	5	—	5
Greens Norton	317	314	—	—	1	3
Litchborough	86	85	—	1	—	1
Maidford	56	54	—	2	—	2
Old Stratford	313	313	—	—	—	—
Pattishall	306	303	—	3	—	3
Paulerspury	310	307	—	1	1	3
Potterspury	438	418	—	4	1	20
Shutlanger	92	91	—	—	1	1
Silverstone	386	384	—	1	1	2
Slapton	32	30	—	1	1	2
Stoke Bruerne	93	91	—	1	1	2
Tiffield	58	57	—	1	—	1
Towcester	1160	1151	—	4	—	9
Wappenham	96	93	—	3	—	3
Weston and Weedon	111	111	—	—	—	—
Whittlebury	137	134	—	3	—	3
Wicken	102	101	—	1	—	1
Woodend	70	68	—	2	—	2
Yardley Gobion	321	317	—	2	—	4

TABLE NO. 4.

DRAINAGE AND SEWERAGE

<i>Parish</i>	<i>House drains discharging to</i>			<i>Houses with</i>	
	<i>Sewers</i>	<i>Cess-pools or septic tanks</i>	<i>Roadside drains, ditches, etc.</i>	<i>W.Cs.</i>	<i>Pail Closets</i>
Abthorpe ...	—	78	13	78	13
Adstone ...	—	18	18	24	12
Blakesley ...	—	98	44	107	35
Blisworth ...	400	13	4	414	3
Bradden ...	—	14	17	14	17
Cold Higham ...	71	2	1	69	5
Cosgrove ...	145	16	—	161	—
Deanshanger ...	539	4	3	542	4
Easton Neston ...	26	7	2	34	1
Gayton ...	141	4	5	141	9
Grafton Regis ...	—	58	14	55	17
Greens Norton ...	274	43	—	317	—
Litchborough ...	82	4	—	82	4
Maidford ...	—	34	22	39	17
Old Stratford ...	307	6	—	313	—
Pattishall ...	294	12	—	300	6
Paulerspury ...	296	10	4	306	4
Potterspury ...	405	28	5	432	6
Shutlanger ...	86	3	3	89	3
Silverstone ...	369	12	5	381	5
Slapton ...	—	29	3	29	3
Stoke Bruerne ...	80	10	3	90	3
Tiffield ...	56	2	—	57	1
Towcester ...	1104	45	11	1151	9
Wappenham ...	—	79	17	79	17
Weston & Weedon	18	72	21	92	19
Whittlebury ...	125	10	2	135	2
Wicken ...	85	17	—	102	—
Woodend ...	—	45	25	62	8
Yardley Gobion	307	14	—	320	1

TABLE No. 5

PREVENTION OF DAMAGE BY PESTS ACT, 1949

			<i>Type of Property</i>	
			<i>Non- Agricultural</i>	<i>Agricultural</i>
Properties other than sewers				
1. Number of properties in district	...	...	6,484	238
2. (a) Total number of properties (including nearby premises) inspected following notification	...	...	130	12
(b) Number infested by (i) Rats	...	...	109	12
(ii) Mice	...	...	15	—
3. (a) Total number of properties inspected for rats and/or mice for reasons other than notification			1,168	102
(b) Number infested by (i) Rats	...	...	222	67
(ii) Mice	...	...	3	—

TABLE No. 6

**CARCASES AND OFFAL
INSPECTED AND CONDEMNED IN WHOLE OR IN PART**

	<i>Cattle</i>	<i>Calves</i>	<i>Pigs</i>	<i>Sheep and Lambs</i>
Number killed (if known) ...	13,680	3	32,555	46,276
Number Inspected	13,680	3	32,555	46,276
All diseases except tuberculosis and cysticerci—				
Whole carcasses condemned	5	1	12	4
Carcasses of which some part or organ was condemned ...	7,710	Nil	2,954	2,728
Percentage of the number in- spected affected with disease other than tuberculosis and cysticerci	56.3	33.0	9.1	5.9
Tuberculosis only :				
Whole carcasses condemned	Nil	Nil	Nil	Nil
Carcasses of which some part or organ was condemned ...	Nil	Nil	163	Nil
Percentage of the number in- spected affected with tuber- culosis	Nil	Nil	0.5	Nil
Cysticercosis—				
Carcasses of which some part or organ was condemned	202	Nil	Nil	Nil
Carcasses submitted to treat- ment by refrigeration ...	8	Nil	Nil	Nil
Generalized and totally con- demned	Nil	Nil	Nil	Nil

FOOD SURRENDERED AND DESTROYED

	<i>Tons</i>	<i>Cwts</i>	<i>lbs.</i>
Meat at slaughterhouses ...	260	—	—
Meat at wholesale premises ...	—	7	—
Meat at retail shops	—	—	—
Cooked meat and meat products	—	—	—
Canned meats	—	—	30
Other canned foods	—	—	100
Fish (fresh)	—	—	—
Fruit and vegetables (fresh) ...	—	—	—
Other foods	—	1	—

TABLE No. 7

MONTHLY INCIDENCE OF NOTIFIABLE DISEASES
(Other than Tuberculosis), 1967

<i>Disease</i>	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Measles	18	13	13	82	56	40	29	22	—	—	—	—	273
Whooping Cough	—	—	—	—	—	8	4	—	—	—	2	—	14
Scarlet Fever ...	2	—	2	2	2	3	—	1	—	—	—	—	12
Pneumonia ...	2	—	—	—	1	—	—	—	—	—	—	—	3
Infective Hepatitis	—	—	—	—	—	1	1	—	—	—	—	—	2
Food Poisoning ...	—	—	—	1	—	—	—	—	—	—	—	—	1
TOTAL ...	22	13	15	85	59	52	34	23	—	—	2	—	305

TABLE No. 8

AGE INCIDENCE OF NOTIFIABLE DISEASES
(Other than Tuberculosis), 1967

<i>Disease</i>	—1	—2	—3	—4	—5	—10	—15	—20	—35	—45	—65	65+	TOTAL
Measles	20	48	41	37	42	78	3	4	—	—	—	—	273
Whooping Cough	1	—	1	1	2	6	2	—	1	—	—	—	14
Scarlet Fever ...	—	1	3	2	2	4	—	—	—	—	—	—	12
Pneumonia ...	—	—	—	—	—	1	—	—	—	—	1	1	3
Infective Hepatitis	—	—	—	—	—	—	—	1	1	—	—	—	2
Food Poisoning ...	—	—	—	—	—	1	—	—	—	—	—	—	1
TOTAL ...	21	49	45	40	46	90	5	5	2	—	1	1	305

TABLE No. 9

INCIDENCE OF NOTIFIABLE DISEASES
(Other than Tuberculosis), 1967
INDIVIDUAL PARISHES

<i>Parish</i>	<i>Measles</i>	<i>Whooping Cough</i>	<i>Scarlet Fever</i>	<i>Pneumonia</i>	<i>Infective Hepatitis</i>	<i>Food Poisoning</i>	<i>Total</i>
Adstone	2	—	—	—	—	—	2
Blakesley	19	7	1	—	—	1	28
Blisworth	12	2	—	—	—	—	14
Cosgrove	2	—	1	—	—	—	3
Deanshanger	21	—	—	—	—	—	21
Gayton	3	—	—	—	—	—	3
Grafton Regis	1	—	—	—	—	—	1
Greens Norton	12	—	—	—	—	—	12
Maidford	4	—	—	—	—	—	4
Old Stratford	5	—	—	—	—	—	5
Pattishall	3	—	—	—	—	—	3
Paulerspury	61	—	4	2	—	—	67
Potterspury	45	—	—	—	—	—	45
Shutlanger	7	—	—	—	—	—	7
Silverstone	10	—	1	1	—	—	12
Stoke Bruerne	3	—	—	—	—	—	3
Tiffield	3	—	1	—	—	—	4
Towcester	11	—	3	—	—	—	14
Wappenham	8	—	1	—	—	—	9
Weston and Weedon	19	—	—	—	1	—	20
Whittlebury	4	—	—	—	—	—	4
Woodend	8	5	—	—	1	—	14
Yardley Gobion	10	—	—	—	—	—	10
TOTAL	273	14	12	3	2	1	305

TABLE NO. 10

**Prescribed particulars on the administration of the Factories Act, 1937,
for the year 1967**

PART I OF THE ACT

1. Inspections for purposes of provisions as to health (including inspections made by the Public Health Inspector) :

<i>Premises</i>	<i>Number on Register</i>	<i>Number of</i>		
		<i>Inspections</i>	<i>Written Notices</i>	<i>Occupier Prosecuted</i>
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	3	3	—	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	84	49	—	—
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises) ...	24	38	—	—
TOTAL	111	90	2	—

2. Cases in which defects were found:

Particulars	Number of cases in which defects were found				Number of cases of which prosecutions were instituted
	Found	Remedied	Referred To H.M. Inspector	By H.M. Inspector	
Want of cleanliness (S.1.)	2	2	—	—	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Inadequate ventilation (S.4)	—	—	—	—	—
Ineffective drainage of floors (S.6)	1	1	—	—	—
Sanitary Conveniences (S.7)					
(a) Insufficient	1	—	—	—	—
(b) Unsuitable or defective	—	—	—	—	—
(c) Not separate for sexes	—	—	—	—	—
Other offences against the Act (not including offences relating to Outwork)	—	—	—	—	—
TOTAL	4	3	Nil	Nil	Nil

3. No outworkers were notified in the district during 1967.

TABLE No. 11

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963

<i>Class of Premises</i>	<i>Total Premises registered at end of year</i>	<i>No. of Persons employed</i>	<i>Premises inspected</i>
Offices	28	194	28
Retail Shop	43	137	43
Wholesale shops etc.	2	7	2
Public Catering Establishments	9	62	9
Canteens	3	10	3
Fuel Storage Depots	2	9	2

